QC-001-1C PATENT

REMARKS

Claims 1-19, 21-28, and 30-46 are pending in the above-identified application. Of these, claims 19, 21-26, and 34-46 are rejected, claims 27 and 28 are objected to, and claims 1-19, 21-28, and 30-46 are subjected to a restriction requirement. Applicants respectfully request reconsideration.

Election of Claims

Applicants hereby cancel non-elected claims 19-29.

Specification

The examiner objected to the specification as unsupportive of original claims 27 and 28 and of similar later filed claims 40 and 41. Paragraph [0024] is amended to recite the temperature and pressure ranges of claims 27 and 28. Claims 27 and 28 were part of the original application, so the amendments to the specification do not constitute new matter. Amended paragraph [0024] supports claims 27, 28, 40, and 41, so the examiner's objection to the specification as lacking such support should be withdrawn.

The examiner further objected to the use of the trademark VESPEL, noting that trademarks should be capitalized and accompanied by the generic terminology. Applicants' specification, as originally filed, contained three instances of "VESPEL," all of which are capitalized. The first two instances, in paragraph [0006], are accompanied by the generic terminology. The third instance, in paragraph [0008], is deleted. The objection to Applicants' use of "VESPEL" should therefore be withdrawn.

Rejections Under 35 U.S.C. §112, First Paragraph

Claims 42 and 43 stand rejected under the first paragraph of section 112 for failure to comply with the written-description requirement. The examiner writes:

The specification teaches ionized hydrogen and ionized nitrogen, but does not teach the limitation of any "ionized gas," as recited in claim 42. The specification teaches a temperature about 212 degrees F, but does not teach the limitation of "at least" 212 degrees F.

QC-001-1C PATENT

(OA, page 3). Regarding the rejection of the "at least 212" language, Applicants assume the examiner is referring to claim 36, and not claim 43.

First, as to the limitation of "ionized gas," the specification states "oxidizing agents, such as hydrogen peroxide, or reducing agents, such as ionized hydrogen, may be added to the steam." [0020]. Consistent with this language, claim 42 is amended to recite a "reducing agent" that is directed with the steam. Claim 43, also amended, notes that reducing agent "includes as least one of ionized hydrogen and ionized nitrogen." These claims, as amended, find clear support in applicants' paragraph [0020], so the rejections of claims 42 and 43 over §112, first paragraph, should be withdrawn.

Second, regarding the assumed rejection of claim 36 for its recitation of "at least 212 degrees," that claim is amended to state "above 212 degrees." This amendment is supported, for example, in paragraph [0019], which describes an embodiment in which

The steam within fixture 120 is, in one embodiment, delivered from steam source 115 at ... a temperature above 212 degrees Fahrenheit, e.g., 300 degrees Fahrenheit.

([0019], emphasis added.) Applicants submit that the highlighted language provides clear support for the language of amended claim 36: the rejection of claim 36 should therefore be withdrawn. Applicants also note that the line between "at least 212 degrees" and "above 212 degrees" is philosophically interesting, but there is no practical significance between these two measures.

Rejections Under 35 U.S.C. §112, Second Paragraph

Claims 34 and 46stand rejected as indefinite. With respect to claim 34, the examiner objects to the term "adapted," suggesting the language "source which provides" in its place, and requires "a positive step of removing aluminum and a halogen from the channel of the semiconductor process equipment" (OA, page 3). Claim 34 is amended to recite a "steam source that produces steam...the steam removing the reaction products of aluminum and the halogen from the channel of the component of the semiconductor process equipment" (Claim 34). The amendments address both of the examiner's concerns, so the rejection of claim 34 under the second paragraph of §112 should be withdrawn.

QC-001-1C PATENT

Regarding claim 46, the examiner asserts that "the silicon" lacks antecedent basis. Applicants have therefore amended claim 46 to recite that the semiconductor process equipment of claims 34 and 45, from which claim 46 depends, "processes semiconductor devices having silicon and metal layers." This language is supported e.g. at paragraph [0002]. In light of this amendment, the §112(2) rejection of claim 46 should be withdrawn.

Double Patenting Rejections

Claims 19, 21-26, 34-39, and 44 stand rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 7, and 11 of U.S. Patent 6,648,982. Applicants respond by submitting herewith a Terminal Disclaimer that obviates these rejections. These rejections should therefore be withdrawn.

CONCLUSION

For the reasons presented above, pending claims 19, 21-28 and 34-46 are in condition for allowance; accordingly, Applicants respectfully request a Notice of Allowance. If the Examiner's next action is other than allowance of the pending claims, the Examiner is requested to call Applicants' representative at (925) 621-2113.

Respectfully submitted,

Arthur J. Behiel

Attorney for Applicants

Reg. No. 39,603

I hereby certify that this correspondence is being deposited with the United States Postal Service as first-class mail in an envelope addressed to: Mail Stop, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on February 18, 2005.

Moren O

Signature

Printed Name